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ABSTRACT

The present study was an attempt to assess the impact of Project Head Start upon the parents of children who participated in a 6-month Head Start intervention program in Austin, Texas. The sample was comprised of 57 Negro and 51 Latin-American parents. From the Parent Interview, which was administered to the female caretaker (usually the mother) of each child enrolled in the Head Start program both before and after the intervention had taken place, scales were constructed to measure the level of general optimism reported by each parent, and the aspiration level for the participating child reported by each parent. It was hypothesized that prior parental experience with Project Head Start, current parental experience with the program, and active parental participation in the program would increase parental scores on the two scales. None of these hypotheses was confirmed. It was further predicted that children of parents who showed favorable changes on a scale would gain more from their own Head Start experiences, in terms of changes in the scores on the tests administered to them both before and after the program, than children of parents who showed unfavorable changes on that scale. This prediction was not confirmed. It was also hypothesized that Latin-American parents would show more favorable change on the scales than Negro parents; this hypothesis was not confirmed. (Author)

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ON

HEAD START EVALUATION AND RESEARCH: 1968-1969

TO

THE OFFICE OF ECONOMIC OPPORTUNITY
(Contract No. OEO-4115)

CHILD DEVELOPMENT EVALUATION AND RESEARCH CENTER

John Pierce-Jones, Ph.D., Director

The University of Texas at Austin

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PARENT INVOLVEMENT IN PROJECT HEAD START

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C H A P T E R I

INTRODUCTION

The problem of poverty in America has in recent years begun to receive a great deal of attention. Remedial education programs, public and private, have been developed especially for the children of poverty. Their particular handicaps, resulting from their experiences in the restricted world in which they live and from the expectations passed on to them by their parents, prevent them from participating fully in the educational system as it is presently structured. Children from disadvantaged backgrounds generally have been found to be deficient in verbal and intellectual skills necessary to school achievement. They usually lack the basic frames of reference which would enable them to perform adequately in the classroom setting, such as a high regard for education, ability to defer gratification, and generally good self-concept and aspiration level. Frost and Hawkes (1966), and Ferman, Kornbluh, and

Haber (1965), among many others, have helped document the problems of the poor, including the special problem of education for children of disadvantaged families.

Project Head Start, a Federal program instituted in the summer of 1965 to offer preschool enrichment experiences to disadvantaged children across the nation, has as its goal the improvement of linguistic and cognitive skills in the children of the poor. The program attempts to remedy the deficiencies frequently encountered in disadvantaged children which contribute to their lack of school readiness and poor performance in the early grades of school in the public school system. Head Start offers remedial experiences to four- and five-year old children from economically and socially deprived families. This program has been a particularly controversial educational experiment. While most participating children show initial gains in IQ as measured by standard instruments, and do better on preschool inventory measures after than before the Head Start program, usually they do not perform as well as middle-class children in the primary grades of the public school system. Kraft (1966) and the Westinghouse-Ohio

University study of Head Start (1969) document these equivocal long-range results of the Head Start intervention program.

One possible cause of the failure of Head Start programs to produce long-term beneficial effects in many cases is that abilities were never raised to an appropriate level for adequate school achievement, even though initial gains were made from an extremely low base line. Another explanation, proposed by Kraft (1966) and many others, is that the unchanged environmental factors which continue to influence these children when they are not in the school setting, a major portion of their time, contribute to the maintenance of habits and ways of thinking that are detrimental to performance in the classroom.

In an attempt to implement a more controlled program, The Child Development Center of The University of Texas at Austin has recently participated in a three-region experimental Head Start intervention program. The other two participating agencies were Tulane University and the University of South Carolina Evaluation and Research Centers. In the experimental groups at each location,

special materials were used by the teachers to prepare their students in language and perceptual skills to achieve reading and general school readiness. Different levels of teacher training, several different kinds of supplementary materials, and the use of candy and toys as reinforcers in one group were also included as variables in the experimental design. Control groups received no special materials and were conducted in the usual manner. The primary focus of the three-region study was the evaluation of the special language readiness program and the effects of the variables, listed above, utilized in connection with the program.

Instruments administered to the Austin sample (approximately 65 Negro and 65 Latin-American children aged four and five) are: the Caldwell Pre-School Inventory, the Stanford-Binet Intelligence Scale, the Illinois Test of Psycho-linquistic Ability, the Metropolitan Readiness Test, and the Gates-MacGinitie Readiness Test. These instruments were administered at the beginning and at the end of the six-month intervention program. In addition, a Parent Interview was administered, also at the beginning

and at the end of the program, to the female caretaker (usually the mother) of each child participating in the Head Start program. The program was begun in the fall of 1968 and was completed during the summer of 1969.

Statement of the Problem

The main focus of the three-region study is the evaluation of the special language program as it affects the performance of the children in the experimental classes. The study to be described here attempts to investigate some aspects of the program which are felt to be complimentary to the overall evaluation, but which were not included in it. Specifically, this study deals with parental response to and participation in the program.

The University of Chicago Annual Report on Project Head Start (1967) states that:

> The parents' expressed pleasure in seeing their children get a "head start" and their optimistic belief that their children would have greater opportunities for getting a better education and job than they had had. It is such changes that may lead to long-term gains, not assessed by short-term evaluations of Head Start, which hold the promise for an optimizing environment facilitating the development of individual potentials in our society.

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The Westinghouse-Ohio University national study (1969) states that "parents of Head Start children expressed strong approval of the program and its effect upon their children . . . they reported substantial participation in the activities of the center." This study further states that:

> It is conceivable that the program does have a significant impact on the children but that the effect is matched by other experiences, contravened by the generally impoverished environment to which the disadvantaged child returns after he leaves the Head Start program.

This report also indicated that full year programs were generally more effective than short-term, summer programs.

The present study is an attempt to assess some of the effects that the Austin Head Start program may have had upon the home environments of participating children. If the program has an impact upon the family, which is part of its goal, then the chances that beneficial results may be extended over a longer period of time for the children involved should be increased.

From the Parent Interview, administered before and after the Head Start program to mothers of the children in this study, three sets of scales were constructed by the

author, utilizing a number of items which may give some understanding of the parents' frame of reference regarding their children and their environment.

The first scale is concerned with the parent's general world view, and her perception of her own effectiveness in participating in that world. It has been a frequent finding in connection with investigations of the attitudes of the poor that they feel both hopeless and helpless about their ability to participate meaningfully in the larger scciety. This scale will be called General Optimism (GO) for purposes of this study.

The second scale was constructed from items relating to the parent's stated level of aspiration for the child in Head Start. For the purpose of this study, this scale will be called Aspiration Level for Child (AL).

The third scale is related to some of the child-rearing practices reported by mothers in the Parent interview. This scale will be called Child Rearing Practices (CRP).

Items comprising each of the scales are listed in Appendices A, B, and C.

Parents who actively participated in the Head Start program are compared with parents who did not actively participate in the program in terms of differences between their responses on the first and second administration of the Parent Interview, utilizing the items comprising the three scales outlined above.

Items determining degree of parent participation in the program are listed in Appendix D.

Theoretical Orientation and Background of the Study

G. A. Kelly (1955) proposed a theory of personality which he called "The Psychology of Personal Constructs," which emphasizes individual differences in ways of perceiving and construing the self and the environment. The fundamental postulate of Kelly's theory is that "a person's processes are psychologically channelized by the ways in which he anticipates events." Corollaries to this fundamental postulate relevant to this research program are:

A. Persons differ from each other in their constructions of events.

B. Each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs.

C. A person chooses for himself that alternative in a dichotomized construct through which he anticipates the greater possibility for extension and definition of his system.

Kelly points out in connection with this corollary that a person can constrict or enlarge his psychological field of vision in order to correspond to his expectations. A person for whom safety and certainty are the primary goals may be constrictive in his choice of alternatives, whereas a person not under these constraints may choose to enlarge his psychological field of vision.

D. A person's construction system varies as he successively construes the replications of events.

In other words, changes in a person's constructs conform to his experiences in accurately predicting events.

E. The variation in a person's construction systhem is limited by the permeability of the constructs within whose range of convenience the variants lie.

Regarding this corollary, Kelly states that "the subordinate systems are determined by the superordinate

systems into whose jurisdiction they are placed." This means that very rigidly held constructs are not so amenable to change as constructs which are held with less conviction and are seen as possible of modification.

> F. A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other.

Clarifying this corollary, Kelly states: "A person's tolerance of incompatibility in his daily construction of events is also limited by the definition of the regnant constructs upon whose permeability he depends to give life its over-all meaning." This corollary may be interpreted as stating that the amount of inconsistency a person can experience in his anticipation of events without discomfort depends upon the flexibility of his superordinate constructs.

> G. To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of the other person.

> H. To the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person.

This corollary states that insofar as one person is accurately aware of the psychological processes of another, he may influence the other person in terms of those processes.

Kelly states, later in his elaboration of the theory, that "the construction system sets the limits beyond which it is impossible for him (a person) to perceive. His constructs are controls on his outlook."

From this frame of reference it is possible to examine both individual differences and similarities. We might expect that ethnic groups have undergone some similar experiences and developed some similar outlooks, while at the same time recognizing that individual experience within the family and specific reference group will play a large part in forming expectations. It is also possible to postulate from this viewpoint that the economically and culturally disadvantaged will hold expectations about themselves and the larger society that may result in a constriction of activity and effort to improve their life situation. For example, a person with low self-esteem and low expectations concerning what he can achieve through his

own efforts may not attempt activities which otherwise would prove beneficial to him.

Regarding change in the construction system, Kelly states:

> If a person is to embrace new ideas in his organized system, he needs to have superordinate constructs which are permeable--that is, which admit new elements. Without such permeable superordinate constructs he is limited to a more or less footless shuffling of his old ideas.

We might expect that it is the relative impermeability and rigidity of superordinate constructs, brought about by the limited contact with the larger society and relative confinement within that society, which so often prevents the disadvantaged groups from breaking away from established ways of perceiving themselves and their environment. We might further postulate that the need for safety and what security can be obtained from the environment frequently results in a constrictive outlook. Thus, potentially construct disconfirming experiences are not utilized adequately because they are not perceived adequately.

With this background in mind, this study explores the hypothesis that the Head Start experience helps to

change the manner in which events are anticipated by being a powerful enough force in the environment of participating families to invalidate some of the self-defeating constructs which they may hold, and by helping them to reformulate new, more constructive ways of perceiving events.

Summary

The necessity for Project Head Start to reach into the family structure of participating children was emphasized. A method for determining to what extent this goal has been met was stated. The theoretical orientation of "Personal Constructs" was presented as the background for this study.

C H A P T E R I I

REVIEW OF RELEVANT RESEARCH

In this chapter research literature will be examined for several areas. Evaluations of Project Head Start will be summarized, environmental factors pertinent to emotional and intellectual development will be discussed, and the role of compensatory education and early intervention will be surveyed.

Literature Survey

J. S. Coleman (1966), in discussing Project Head Start, reports that an evaluation of the summer 1965 program, the first Head Start program, showed that:

> Controlling for race, region, kindergarten attendance, and various measures of socioeconomic status, it would appear that scores for participants were consistently higher than scores for nonparticipants from the same schools for pupils from the poorest families: Negroes of low SES (socioeconomic status), particularly those in the rural areas.

I. Kraft (1966), who advocates a national preschool for all children, states:

> With respect to group living, what will they learn from one another that they have not already learned from older brothers or sisters, or that they will not unlearn as soon as they return to the predominating environment? (In the good middle-class nursery there is an empathetic continuity of experience between home and school.)

Regarding the usual 5- to 10-point IQ gain reported at the end of many Head Start programs, he points out that "almost any kind of preschool offering . . . seems to yield the same average IQ gain." He makes a further comment about the program as it is currently operating in many areas: "Class and racially segregated pre-schools--which may become the norm for Head Start centers--may merely enroll parents and children as an early acclimatization device to de facto segregation."

Illustrating the point mentioned above, that a Head Start experience usually results in some measurable improvement, J. L. Howard and W. T. Plant (1967), reporting on a summer program in San Jose, California, found that gains were reported on the Stanford-Binet Intelligence

Scale, the Peabody Picture Vocabulary Test, and the Pictorial Test of Intelligence. These tests were given to kindergarten children who had attended the Head Start program and to children in the same class who had not attended Head Start. The Head Start children showed a higher mean gain than did the control group. D. N. C. Cowling (1967), also reported that children who had participated in a Head Start program were better prepared in terms of language ability and readiness for school than children who had not participated.

Many observers of the Head Start program, such as J. Doherty (1966) feel that one of the factors contributing to such success as the program has shown is the small pupil-to-teacher ratio that is established in Head Start centers.

The University of Hawaii, in its annual report on Head Start (1966-1967), found that one factor which best differentiated between families with children in Head Start and those with no children in the program was having a sibling in Head Start the previous year. It would seem that having prior experience with the program is associated with participation at a later time.

The Westinghouse Learning Corporation/Ohio University (1969) Head Start evaluation, a study of cognitive and affective development of Head Start children, showed that no differences could be discovered for affective development, and a few changes were found for full-year Head Start children on cognitive development only. This report states:

> The most justifiable conclusion to be drawn from this study seems to be that Head Staet as it is presently constituted is insufficient as an independent compensatory program in establishing significant cognitive and affective gains which can be supported, reinforced, or maintained in traditional education programs in the primary grades. . . . In conclusion, although this study indicates that full-year Head Start appears to be a more effective compensatory educational program than summer Head Start, its benefits cannot be described as satisfactory. Therefore we strongly recommend that large scale efforts and substantial resources continue to be devoted to the search for finding more effective programs, procedures, and techniques for remediating the effects of proverty on disadvantaged children.

J. McV. Hunt (1969), in discussing remedial programs for disadvantages children, states:

> Project Head Start was a fine step in the right direction. The danger is that it may have been taken with hopes too high before an adequately effective

> technology of early childhood education for the children of the poor had been developed. All too often, the Head Start programs have merely supplied poor children with an opportunity to play in traditional nursery schools that were designed chiefly to exercise large muscles and to enable middle-class children to escape from their overly strict and solicitous mothers. Such opportunities are unlikely to be very effective in overcoming the deficient skills and motives to be found in the children of the poor.

He further states:

> I am inclined to believe that we shall have to extend our programs to include children of ages less than four. I believe we shall have to involve the help of parents in these programs. Attempts to influence the child-rearing of parents of the lowest socioeconomic status by means of psychotherapy-like counseling have regularly failed. On the other hand, involving parents first as observers and then as aids in nursery schools, where they get an opportunity to see the effects of new (to them) ways of dealing with children and where these techniques are explained and tried out first in school and then in home demonstrations, all this appears to be highly promising.

The Bank Street, New York, College of Education (1966-67) report on Head Start states that "one of the goals of Project Head Start with respect to parents is stimulating their personal and social development." They point out that regular work in the classroom "often results in an increase in the parent's aspiration level." This

statement refers to the parent's own aspiration level for himself, not for his child in Head Start.

B. J. Willmon (1967) discusses the influence of parent participation and involvement on the achievement of Head Start pupils, and concludes: "Parental involvement in Head Start programs appeared to aid in the development of academic achievement and high parental participation accompanied even higher achievement." In a report of the Westinghouse/Ohio study, an editorial in Phi Delta Kappan (1969), points out that one of the better features of Head Start programs has been their emphasis on parent participation. In their Annual Report (1966-67) on Head Start, Michigan State University and Merrill-Palmer Institute state that one of the most meaningful items on the Parent Interview related to the changes that Head Start had made in the parents' lives.

K. Osborn (1967), discussing a survey of Head Start centers he made, points out:

> It (the program) emphasizes the family as fundamental to the child's total development and the role of the parents in developing policies and participating in the program of the center. . . . I am convinced that

> this philosophy (parent participation) is sound and is justified. By and large parents of culturally deprived children are as concerned with the welfare of their young as are any other parents. Perhaps even more so--since these parents know the long term effects of an inadequate education. . . . In some centers, however, there was little or no parent participation . . . we encountered many instances . . . where no real effort was made to include parents in any way. If this program is to be more than first aid, we must bring parents into the center and include them in all aspects of the program.

Osborn, in addition, feels that the small size of the Head Start classes is a definite factor in accounting for much of the success of the program.

In their Annual Report (1967) the University of California System reported that some parents showed a high degree of involvement and participation in the program, while others seemed apathetic and uninvolved with the program. I. Mattick (1968), regarding a Head Start program in Mississippi, reports that:

> The long range effect of people planning together for their children's program and of seeing these plans through in such a lively, intelligent, and creative manner is that it teaches a valuable lesson about the fate of apathy and passive endurance when there is some impetus and opportunity to become active as a group.

Finally, J. Kagan (1969) succinctly states: "The value of Head Start or similar remedial programs has not yet been adequately assessed."

It is evident from the above that much remains to be learned regarding Project Head Start, and that parent participation in the program is likely to be a particularly important variable in any comprehensive evaluation that may be made in the future.

Regarding environmental factors which affect emotional and intellectual development, J. Piaget (1966) states:

> The human being is immersed right from birth in a social environment which affects him just as much as his physical environment. Society, even more, in a sense, than the physical environment, changes the very structure of the individual, because it not only compels him to recognize facts, but also provides him with a ready-made system of signs, which modify his thought; it presents him with new values and it imposes on him an infinite series of obligations. It is therefore quite evident that social life affects intelligence through the three media of language (signs), the content of interaction (intellectual values) and rules imposed on thought (collective logical or pre-logical norms).

L. S. Vygotsky (1962) points out that intellect and affect cannot be separated; they interact, and must be considered

together. Thus, affect acquired at home can influence the intellectual aspect of school experience. He states: "Thought development is determined by language, i.e., by the linguistic tools of thought and by the socio-cultural experience of the child." J. Church (1961) further notes that "the environment plays three major roles in motivation: in the genesis of motivational patterns, in the maintenance of drive level, and in the elicitation of transitory motivational states."

F. Elkin (1960), regarding the influence on the developing child of those with whom he interacts, states:

> The behavior of significant others is also closely related to the development of the child's personality structure. The same behavior on the part of significant others teaches the child the ways of the society and helps determine his personality. Whether a given child is aggressive or submissive, rigid or flexible in his thinking, whether he views outsiders as friendly or unfriendly, whether he views new situations with assurance or trepidation, his particular self-protective defenses, his ability to love--all, in part, are results of the previous behavior of significant others.

A. S. Neill (1960), speaking from his long experience with remedial education, states that the parent-child relationship often interferes with or overrides the

benefits of educational intervention. If the goals of the home and of the school are in conflict, then the child will be in conflict. He concludes that usually the home prevails in cases of discrepancy. Along this same line, B. Berelson and G. A. Steiner (1964) point out that:

> The closer the correspondence between socializing agencies (home vis-a-vis school . . .), the more securely and the more rapidly the socialization takes place. The more the conflicts between them, the slower and the more uncertain the process. If such conflict reaches a high degree of intensity, as felt by the subject, he will tend to renounce one agency in favor of the other, or renounce both, or become psychologically disturbed.

R. D. Hess and V. C. Shipman (1965), studying the communication patterns between Negro mothers and their four-year-old children in four different socioeconomic groups, found that the lower the socioeconomic status of the group, the more primitive and less elaborated was the language structure used between parent and child, resulting in less reflective, less verbal, children at this level. Also studying the intellectual development of slum children, V. P. John (1963) compared black children of three socioeconomic levels on verbal skills and IQ. At both the

first and fifth grade levels in school, he found that the higher the socioeconomic level of the children tested, the higher were their scores.

W. Bell (1957), studying anomie in relation to class structure, states: "It seems clear . . . that anomie is inversely related to economic status."

S. A. Cohen (1967), regarding language skills and cultural deprivation, states:

> The culturally deprived child depends more on the school for language development and general verbal intelligence than does the middle class child. In fact, the latter learns most of his verbal behavior, including reading, informally through his home environment.

Even A. R. Jensen (1969), in his paper proposing that intellectual achievement is genetically determined, states:

> There seems to be little doubt that a deprived environment can stunt intellectual development and that immersion in a good environment in early childhood can largely overcome the effects of deprivation, permitting the individual's genetic potential to be reflected in his performance.

J. McV. Hunt (1969), regarding compensatory education, states:

> Investigations of compensatory education have now shown that traditional play school has little to offer the children of the poor, but programs which made an effort to inculcate cognitive skills, language skills, and number skills, whether they be taught directly or incorporated into games, show fair success. A substantial portion of this success endures. If the parents are drawn into the process, the little evidence available suggests that the effect on the children, and on the parents as well, increases in both degree and duration.

C. V. Hamilton (1968), discussing education for the disadvantaged, sees parental involvement in the schools as a necessity, and as one of the most important goals of such education. E. A. Gordon (1967), after reviewing compensatory educational programs, concludes:

> Almost every sizable program of compensatory education now includes some effort to increase parental involvement in project goals as more and more schools serving disadvantaged neighborhoods have moved toward breaking down the barrier that has separated school and home.

L. D. Crow, W. I. Murry, and H. H. Smythe (1966), in speaking of education for the culturally disadvantaged, state:

> School personnel in the disadvantaged neighborhoods must attempt to establish meaningful relationships with parents whose socio-economic circumstances may be different from their own. In addition, teachers need

> to help the parents and their children sustain forward-looking relationships in the face of a variety of psychological and sociological conditions that tend to defeat the process.

They further state:

> Attitudes exhibited by parents who live in impoverished areas of our cities offer little beyond a sense of despair and resignation to existing conditions. These attitudes are transmitted to the children, who tend to reflect similar attitudes in their behavior. It is characterized by low school achievement, poor attendance, and eventually dropping out of school. Thus is repeated the cycle of hopelessness and despair already present in the home. School personnel must find ways of changing these attitudes. It is both their challenge and their responsibility.

Finally, E. W. Gordon (1965), after reviewing programs of compensatory education, reports that:

> Inappropriate motivation, depressed levels of aspiration, dysfunctional patterns of conceptualization, academic disenchantment and underdeveloped intellect are all too frequently products of poverty, social disorganization, lack of opportunity, social isolation and prejudicial discrimination.

He concludes by saying that "significant changes in behavior are products of significant changes in life experiences."

In conclusion, it should be noted that Head Start programs over the last five years have been extremely diverse in nature. Some have, as indicated in the literature, been little more than care-taking facilities, while others, exemplified by the current three-region program, have seriously attempted to address themselves to the specific problems presented by disadvantaged children. Special language and concept formation training have sometimes been offered, sometimes not. This diversity of programs has seldom been taken into account when evaluations have been undertaken. Most evaluations have been in terms of IQ and school readiness gains made by the children in the various programs, with little attention paid to other factors, such as emotional adjustment and general health level, which may have been changed as a result of the Head Start experience. Standardized achievement tests may not always register very real improvements which may have occurred in the life of the child and perhaps that of his family as well. It is felt that these other aspects of development should not be overlooked in evaluating the results of Head Start programs, and that the study

undertaken here represents an attempt to focus on some of these important areas. At the same time, the evaluation of the three-region program represents an attempt to assess the direct benefits of a remedial program with specific goals aimed at improving the linguistic skills of the children involved.

Summary

Research literature has been examined in the areas of evaluation of Head Start programs, environmental factors related to emotional and intellectual development, and the role of compensatory education for disadvantaged children.

C H A P T E R I I I

METHODS AND PROCEDURES

In this chapter the instrument to be used in this study will be described, the hypotheses to be tested will be stated, and the sampling and data collection procedures will be outlined. Methods of testing the hypotheses will be described.

Instrument

Before describing in detail the scales constructed from the Parent Interview which were used in this study, a note on the use of such data for purposes other than that for which it was originally designed seems in order. J. I. Kitsuse and A. V. Cicourel (1963), discussing the reliability of official statistics for use in sociological studies, state that the frequent seemingly inappropriate categorization of events found in such sources are, in last analysis, important statements concerning the values of the

agents of society which deal with the problems under consideration. These authors were particularly concerned with juvenile delinquency, and speak in terms of deviant behavior. However, their remarks seem most appropriate:

> Indeed, in modern societies where bureaucratically organized agencies are increasingly invested with social control functions, the activities of such agencies are centrally important "sources and contexts" which generate as well as maintain definitions of deviance and produce populations of deviants. Thus, rates of deviance constructed by the use of statistics routinely issued by these agencies are social facts par excellence . . . the rates of deviant behavior are produced by the actions taken by persons in the social system which define, classify and record certain behaviors as deviant.

Thus, while the scales constructed from the officially derived Parent Interview may not be as precisely designed as might be desirable for the purposes of the study, they nonetheless reflect the frame of reference from which the Office of Economic Opportunity approached the problem of determining parent response to Project Head Start.

Three scales were constructed from the Parent Interview. They are: General Optimism (GO), Aspiration Level for Child (AL), and Child Rearing Practices (CRP).

Items and scoring procedures for each scale will be found in Appendices A, B, and C.

Originally, the investigator intended to devise a scale measuring the degree of community involvement reported by the parents, in terms of their membership and activity in various community organizations. However, inspection of the pertinent items showed that participation in community organizations by the parents was limited to religious groups, and groups connected with the education of the parents' children. There was a high degree of probability that reported membership in community organizations concerning education resulted from the parents' current enrollment of a child in Head Start, and this item was not considered a valid question for the purpose originally intended. The possibility of constructing such a scale was consequently abandoned, and the CRP scale was subsequently devised.

For scoring purposes, a total score was obtained for each scale by summing scores obtained for each item in the scale. The total score for any scale, then, is the sum of the scores recorded for each item.

Hypotheses

This study was designed to test the following hypotheses:

Hypothesis I — Parents who have had a child in Head Start prior to the current program will respond more favorably initially on the scales than parents for whom this is the first Head Start experience.

Hypothesis II — Parents for whom the current program is the first Head Start experience will show favorable change on the scales when the second administration of the items is compared with the first administration.

Hypothesis III — Parents who participate actively in the Head Start program will show more favorable change on the scales than parents who do not participate actively in the program.

Hypothesis IV — Children of parents who show favorable change on the scales will gain more from the Head Start program, in terms of their own performances on the instruments administered to them before and after the program, than children of parents who show little or no change on the scales.

Hypothesis V — There will be ethnic differences with regard to amount of favorable changes shown by parents; Negro parents will show less change in the favorable direction than will Latin parents.

These hypotheses are designed to determine whether the Head Start experience has a great enough impact on participating families to alter parents' construction systems regarding themselves, their children, and their environment. Hypothesis III concerns itself with the question of whether active participation in the program provides the parents with additional experience, in terms of construct-disconfirming and construct-changing events, enabling them to revise more radically their construction systems in the areas under consideration. Hypothesis IV is concerned with the expectation that parents whose construction of events is undergoing positive change will transmit their newly forming value systems to their children, who will, in turn, approach their own Head Start experience with increasing enthusiasm and involvement. This expectation is derived from the social process corollaries of the Theory of Personal Constructs. Hypothesis V predicts that the superordinate constructs, and thus the permeability of the construct system, of the Negro parents will be more tightly organized and less adaptable to change than those of the Latin parents. This expectation is held because of the

more obvious and institutionalized discrimination which has been inflicted upon Negroes in the South for so long. Discriminatory practices directed against the Latin-American population in the South are no longer as severe as they have been in the past, and as they still are for the Southern Negro. Approximately two generations of Latin-Americans have not experienced the devastating effects of severe discrimination, and it is expected that this has resulted in less restrictive construction systems among this population.

Sample

One hundred thirty-nine female caretakers (usually parents) were interviewed at the beginning of the Head Start program, and one hundred forty-nine were interviewed at the end of the program. Caretakers who did not receive both interviews were eliminated from the sample, as were the six participating Anglo caretakers. Two more caretakers were eliminated from the sample because the same caretaker had not been interviewed on both occasions. The remaining sample of 108 parents, 57 Negroes and 51 Latins, was used in this study.

All data were obtained from The Child Development Center of The University of Texas at Austin, the local participant in the three-region study outlined earlier.

Methods of Analysis

Reliability of the scores on the scales, and inter-correlations among the scales, were first computed, utilizing Veldman's (1967) programs.

Hypotheses I and II were tested using Hotelling's (1931) T^2 test, an extension of the regular *t* test which is applicable for use with groups of means, and which is independent of correlation among the variates.

Hypotheses III, IV, and V were tested with analysis of variance procedures for repeated measures. The first and second administrations of the instruments constitute the repeated measures. Veldman's (1967) computer programs again were utilized. Hypotheses III and V required three analyses each, one for each scale. Hypothesis IV required five analyses, one for each instrument administered to the Head Start children.

Raw scores for each of the instruments administered to the children were used in the analyses, except in the

case of the Stanford-Binet Intelligence Scale. For this instrument, the computed IQ is the score reported in the data. As R. E. Snow (1969) states in his critique of Rosenthal and Jacobson's Pygmalion in the Classroom, raw scores are preferable to IQ scores, and would have been used had they been available.

If confirmed, Hypothesis I would have indicated that prior experience with Project Head Start influenced parents' opinions favorably in terms of their aspiration level for their children, their child-rearing practices, and their level of general optimism, as measured by the scales constructed for this study.

Hypothesis II, if confirmed, would have indicated that the Head Start experience produced favorable changes on the scales for parents whose children were currently enrolled in the program.

Hypothesis III, if confirmed, would have indicated that active participation in the program on the part of parents resulted in more favorable change than was the case for parents who did not actively participate in the program.

Hypothesis IV, if confirmed, would have indicated that the children of parents who showed favorable change

on the scales gained more from their Head Start experiences than children of parents who did not show favorable change on the scales.

Hypothesis V, if confirmed, would have indicated that Latin parents were more responsive than were Negro parents to factors encountered in the Head Start experience which may favorably affect their frames of reference in the areas under investigation.

Summary

The instrument to be used in this study was described, the hypotheses to be tested were stated, sampling procedures were outlined, and methods of data analysis were described.

C H A P T E R I V

RESULTS

Coefficients of reliability of the scores on the three scales were computed, using Veldman's (1967) computer program for a generalized form of the Kuder-Richardson Formula 20 for dichotomous items. Alpha coefficients of internal consistency for each of the three scales are shown in Table 1 (following page).

Discussion of Findings

The reliability of the GO Scale was considered adequate for purposes of this study, and the reliability of the AL Scale, while lower than desirable (this scale contains only 3 items), was also considered adequate. For the CRP Scale, however, the alpha coefficient was so low as to preclude the use of this scale in any of the analyses undertaken. As Nunnally (1967) states, regarding reliability: "In the early stages of research on . . .

TABLE 1

Reliability Coefficients for GO, AL, and CRP Scales

Scale	GO	AL	CRP
Maximum Possible Score	25.00	15.00	12.00
Mean	13.65	7.21	6.82
Standard Deviation	3.50	2.59	2.34
Alpha Coefficient	.58	.48	.32

hypothesized measures of a construct . . . reliabilities of .60 or .50 will suffice." It was felt that the first scale was definitely satisfactory for the purposes of this study, and that the second scale was reliable enough for inclusion in the analyses at this level of inquiry.

The coefficient of correlation between the GO and AL scales was .09, indicating that the two scales were concerned with very different domains of content. Since this correlation proved to be so low, it was not considered desirable to add together scores on the two scales to obtain a single score, as had been intended for the analysis of Hypothesis IV. Instead, each analysis was carried out separately for each scale.

Hypothesis I predicted that parents who have had a child in Head Start prior to the current program will respond more favorably initially on the scales than parents for whom this current program is the first Head Start experience. This hypothesis was not confirmed. Results of the T^2 analysis are presented in Table 2. The group of parents with no prior experience with Project Head Start did not differ appreciably in their mean scores on the

TABLE 2

Analysis of Differences Between Initial Response on GO and AL Scales for Parents with and without Prior Head Start Experience

Scale	GO	AL
Group 1		
No Prior Experience N = 64		
Mean	13.83	7.44
S.D.	3.42	2.87
Group 2		
Prior Experience N = 44		
Mean	13.39	6.89
S.D.	3.76	2.21

$T^2 = 1.478$

$F = 1.464$
(DF 1 = 2, DF 2 = 105)

$P = .235$

scales from the group of parents with prior experience. The very small differences which do appear tend to favor the group without prior experience.

Hypothesis II predicted that parents for whom the current program is the first Head Start experience will show favorable changes on the scales. This hypothesis was not confirmed. Results of the T^2 analysis are shown in Table 3. There are no appreciable differences of the mean scale scores between the two administrations of the parent interview.

Hypothesis III predicted that parents who actively participate in the Head Start program will show more favorable change than parents who do not actively participate in the program. For purposes of analysis, active participation was defined as a total score of five or more on the four items comprising reported parent participation in the program. This score indicates either participation a few times in each activity connected with the Head Start program, or concentrated participation in one or more activities. These activities were: attendance at parent

TABLE 3

Analysis of Changes Shown on GO and AL Scales
by Parents for Whom the Current Program Is
the First Head Start Experience

Scale	GO	AL
Group 1		
Pretest N = 64		
Mean	13.83	7.44
S.D.	3.42	2.87
Group 2		
Posttest N = 64		
Mean	13.30	7.63
S.D.	3.76	3.15

$T^2 = 1.050$

$F = 1.042$
(DF 1 = 2, DF 2 = 125)

$P = .357$

meetings, visiting the Head Start center, volunteer work in the classroom, and attendance at parents' council meetings.

This hypothesis was not confirmed. Results of the analyses of variance with repeated measures for each scale are shown in Tables 4 and 5, and in Figure 1.

For the GO Scale, the difference between groups was not statistically significant. Mean scores on both administrations of the parent interview were slightly higher, however, for the high participation group. Both groups had slightly lower mean scores for the second administration of the parent interview than for the first administration, but the mean loss was not statistically significant. The difference between the groups in mean loss (interaction effect) also was not statistically significant.

For the AL Scale, the overall difference between groups was significant at the .03 level of confidence; as with the GO Scale, mean scores on both administrations of the parent interview were higher for the high participation group. Both groups gained slightly on the second

TABLE 4

Change Shown on GO Scales by Parents Who Actively Participate in the Program and by Parents Who Do Not Actively Participate

Group A, Low Participation. N = 51

Group B, High Participation. N = 57

Source	Mean Square	DF	F-Ratio	P
Total	12.679	215		
Between	20.929	107		
Groups	59.591	1	2.898	.088
Error (G)	20.564	106		
Within	4.505	108		
Trials	6.338	1	1.408	.236
G X T	2.915	1	.648	.572
Error (T)	4.502	106		

Group Means	A	B
	12.922	13.974

Trial Means	1	2
	13.648	13.306

G X T Means		1	2
	A	13.216	12.628
	B	14.035	13.912

TABLE 5

Change Shown on AL Scale by Parents Who Actively Participate in the Program and by Parents Who Do Not Actively Participate

Group A, Low Participation. N = 51

Group B, High Participation. N = 57.

Source	Mean Square	DF	F-Ratio	P
Total	7.980	215		
Between	12.362	107		
Groups	56.647	1	4.743	.030
Error (G)	11.944	106		
Within	3.639	108		
Trials	13.500	1	3.791	.051
G X T	2.048	1	.575	.544
Error (T)	3.561	106		

Group Means	A	B
	6.922	7.947

Trial Means	1	2
	7.213	7.713

G X T Means		1	2
	A	6.569	7.275
	B	7.790	8.105

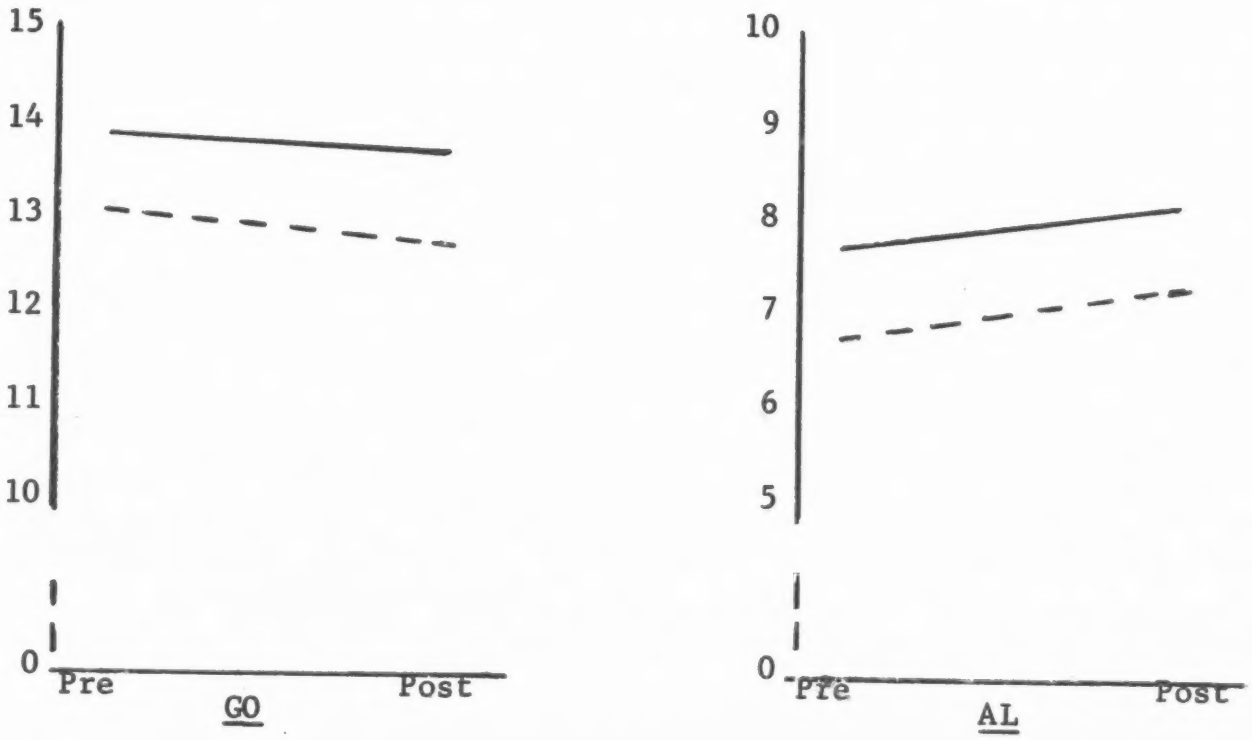


FIGURE 1

Change Shown on GO and AL Scales by Parents Who Actively Participate in the Program and by Parents Who Do Not Actively Participate

administration of the parent interview, with the highest gain shown by the low participation group, but the overall gain from Trial 1 to Trial 2 just failed to reach statistical significance at the .05 level of confidence. Once again, the group-by-trials interaction effect was not statistically significant.

Hypothesis IV predicted that children of parents who show favorable change on the scales will gain more from the Head Start program, in terms of their own scores on the instruments administered to them before and after the program, than children of parents who show little or no change on the scales. Because of the unexpectedly large number of parents who showed change in an unfavorable direction on both the GO and AL scales, the analyses were carried out only for children of parents showing positive and negative changes on each scale; children of parents who showed no change on the scales were omitted from the analyses. It was decided that this procedure would, in addition to creating groups of more nearly equal size, help to clarify the relationship of the parents' changes on the scales to the performances of their children

on the instruments administered to them. Results of the analyses are shown in Tables 6 through 15, and Figures 2 through 6. This hypothesis was not confirmed; the results were negative for both parent scales on all pupil instruments.

It can be seen from the tables that differences between trials were (with only one exception) statistically significant at least at the .03 level of confidence, in a favorable direction, for all instruments. For the Illinois Test of Psycho-linguistic Ability, the difference between groups was also significant at the .05 level of confidence, with means for both administrations of the test substantially higher for the group of children whose parents showed favorable change on the AL Scale; there was no substantial difference between the groups for the GO Scale. As can be seen from the figures, the favorable change group obtained higher means on both administrations of the Stanford-Binet Intelligence Scale and the Caldwell Pre-School Inventory, although the differences were not statistically significant. For the Metropolitan Readiness Test, children of parents showing favorable change on the GO Scale obtained

TABLE 6

Change Shown on the Stanford-Binet Intelligence Scale
by Children of Parents Showing Favorable and
Nonfavorable Change on the GO Scale

Group A, Favorable Change. N = 35

Group B, Nonfavorable Change. N = 54

Source	Mean Square	DF	F-Ratio	P
Total	124.057	177		
Between	219.018	88		
Groups	163.125	1	.743	.605
Error (G)	219.661	87		
Within	30.163	89		
Trials	156.680	1	5.436	.021
G X T	20.249	1	.703	.591
Error (T)	28.823	87		

Group Means	A	B
	88.386	86.426

Trial Means	1	2
	86.258	88.135

G X T Means		1	2
	A	87.029	89.743
	B	85.759	87.093

TABLE 7

Change Shown on the Stanford-Binet Intelligence Scale
by Children of Parents Showing Favorable and
Nonfavorable Change on the AL Scale

Group A, Favorable Change. N = 51

Group B, Nonfavorable Change. N = 39

Source	Mean Square	DF	F-Ratio	P
Total	125.295	179		
Between	223.520	89		
Groups	74.802	1	.332	.573
Error (G)	225.210	88		
Within	28.161	90		
Trials	104.272	1	3.829	.051
G X T	33.768	1	1.240	.268
Error (T)	27.233	88		

Group Means	A	B
	86.814	85.513

Trial Means	1	2
	85.489	87.011

G X T Means	1	2
A	86.431	87.196
B	84.256	86.769

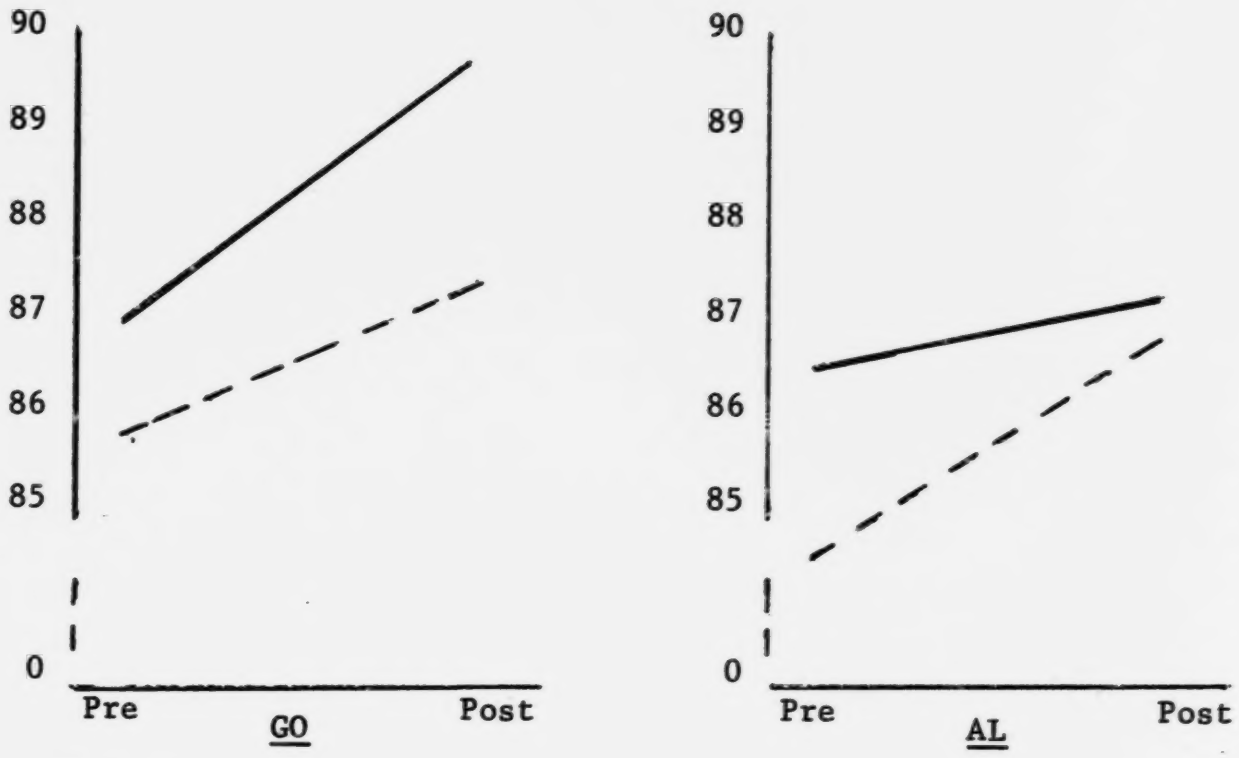


FIGURE 2

Change Shown on the Stanford-Binet Intelligence Scale by Children of Parents Showing Favorable and Nonfavorable Change on GO and AL Scales

TABLE 8

Change Shown on the Caldwell Pre-School Inventory by Children of Parents Showing Favorable and Nonfavorable Change on the GO Scale

Group A, Favorable Change. N = 34

Group B, Nonfavorable Change. N = 51

Source	Mean Square	DF	F-Ratio	P
Total	95.229	169		
Between	157.936	84		
Groups	49.632	1	.312	.585
Error (G)	159.241	83		
Within	33.259	85		
Trials	1,779.412	1	142.452	.000
G X T	10.809	1	.865	.643
Error (T)	12.491	83		

Group Means	A	B
	44.779	43.677

Trial Means	1	2
	40.882	47.353

G X T Means	1	2
A	41.853	47.706
B	40.235	47.118

TABLE 9

Change Shown on the Caldwell Pre-School Inventory by Children of Parents Showing Favorable and Nonfavorable Change on the AL Scale

Group A, Favorable Change. N = 49

Group B, Nonfavorable Change. N = 38

Source	Mean Square	DF	F-Ratio	P
Total	93.924	173		
Between	154.498	86		
Groups	72.753	1	.468	.503
Error (G)	155.459	85		
Within	34.046	87		
Trials	1,815.195	1	138.723	.000
G X T	34.577	1	2.642	.104
Error (T)	13.085	85		

Group Means	A	B
	44.133	42.829

Trial Means	1	2
	40.333	46.793

G X T Means		1	2
	A	40.510	47.755
	B	40.105	45.553

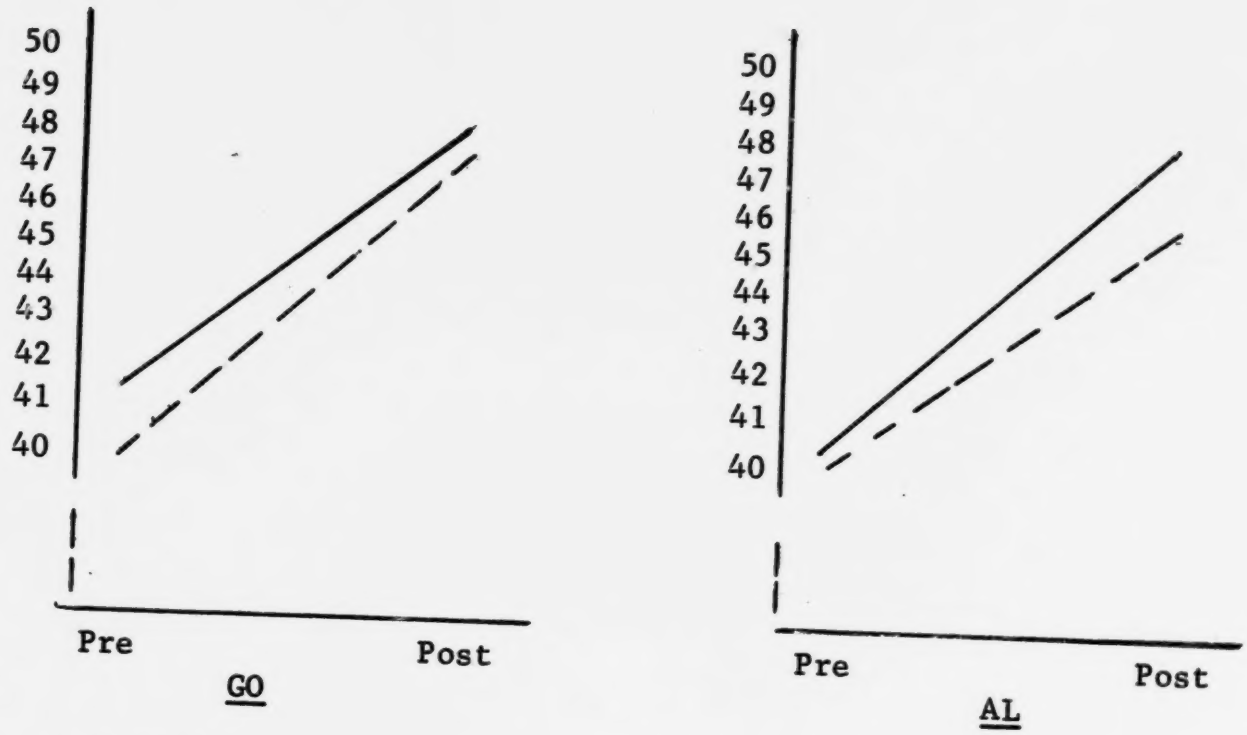


FIGURE 3

Change Shown on the Caldwell Pre-School Inventory by Children of Parents Showing Favorable and Nonfavorable Change on GO and AL Scales

TABLE 10

Change Shown on the Metropolitan Readiness Test by Children of Parents Showing Favorable and Nonfavorable Change on GO Scale

Group A, Favorable Change. N = 35

Group B, Nonfavorable Change. N = 53

Source		Mean Square	DF	F-Ratio	P
Total		131.048	175		
Between		207.166	87		
Groups		51.238	1	.245	.628
Error (G)		208.979	86		
Within		55.796	88		
Trials		1,454.750	1	36.713	.000
G X T		47.500	1	1.199	.276
Error (T)		39.625	86		
Group Means		A	B		
		41.857	40.755		
Trial Means		1	2		
		38.318	44.068		
G X T Means		1	2		
	A	38.343	45.371		
	B	38.302	43.208		

TABLE 11

Change Shown on the Metropolitan Readiness Test by Children of Parents Showing Favorable and Nonfavorable Change on AL Scale

Group A, Favorable Change. N = 50

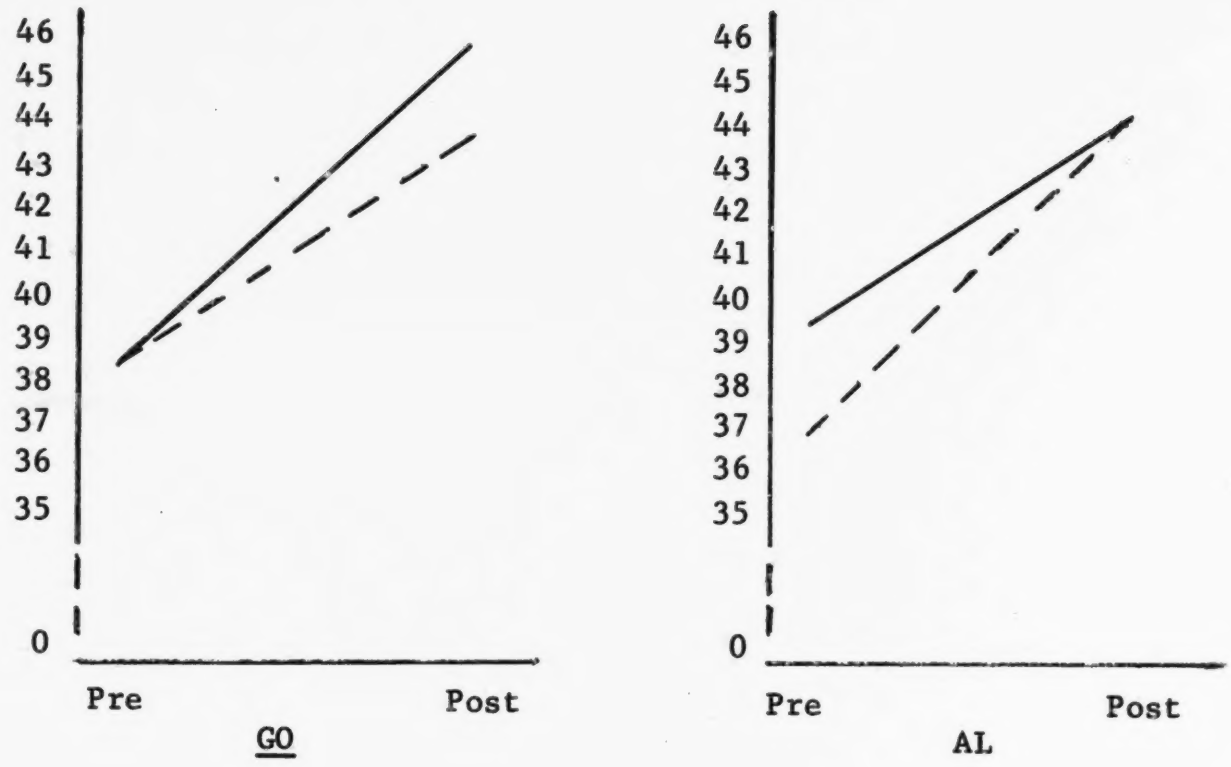
Group B, Nonfavorable Change. N = 39

Source	Mean Square	DF	F-Ratio	P
Total	116.392	177		
Between	175.999	88		
Groups	67.657	1	.382	.545
Error (G)	177.244	87		
Within	57.455	89		
Trials	1,466.972	1	35.677	.000
G X T	69.230	1	1.684	.195
Error (T)	41.118	87		

Group Means	A	B
	41.640	40.397

Trial Means	1	2
	38.225	43.966

G X T Means	1	2
A	39.320	43.960
B	36.821	43.974



Groups:
Favorable Change ————————
Nonfavorable Change - - - - -

FIGURE 4

Change Shown on the Metropolitan Readiness Test by Children of Parents Showing Favorable and Nonfavorable Change on GO and AL Scales

TABLE 12

Change Shown on the Gates-MacGinitie Readiness Test by Children of Parents Showing Favorable and Nonfavorable Change on the GO Scale

Group A, Favorable Change. N = 34

Group B, Nonfavorable Change. N = 50

Source	Mean Square	DF	F-Ratio	P
Total	166.984	167		
Between	257.684	83		
Groups	11.019	1	.042	.832
Error (G)	260.692	82		
Within	77.363	84		
Trials	3,781.006	1	115.498	.000
G X T	33.086	1	1.011	.319
Error (T)	32.737	82		

Group Means	A	B
	50.912	50.390

Trial Means	1	2
	45.857	55.345

G X T Means		1	2
	A	46.706	55.118
	B	45.280	55.500

TABLE 13

Change Shown on the Gates-MacGinitie Readiness Test by Children of Parents Showing Favorable and Nonfavorable Change on the AL Scale

Group A, Favorable Change. N = 49

Group B, Nonfavorable Change. N = 37

Source	Mean Square	DF	F-Ratio	P
Total	153.898	171		
Between	232.994	85		
Groups	34.458	1	.146	.705
Error (G)	235.358	84		
Within	75.721	86		
Trials	3,739.558	1	115.386	.000
G X T	50.085	1	1.545	.215
Error (T)	32.409	84		

Group Means	A	B
	50.296	49.392

Trial Means	1	2
	45.244	54.570

G X T Means	1	2
A	46.102	54.490
B	44.108	54.676

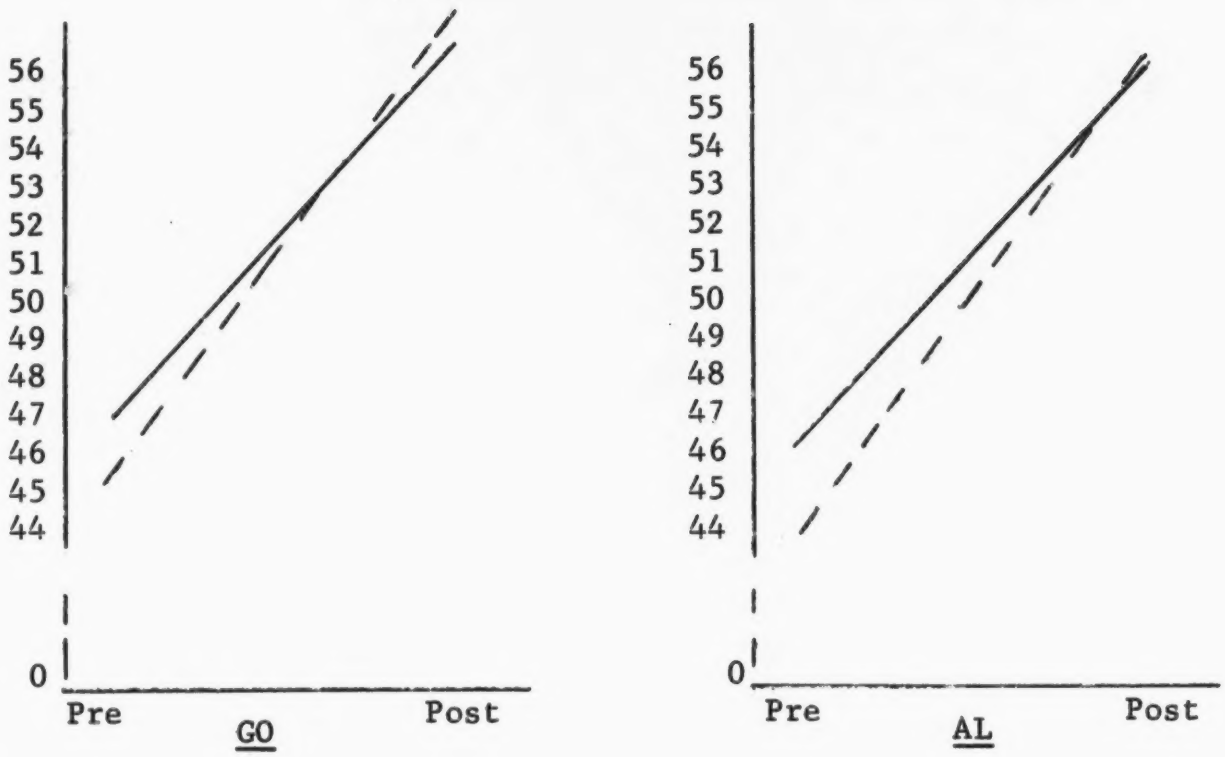


FIGURE 5

Change Shown on the Gates-MacGinitie Readiness Test by Children of Parents Showing Favorable and Nonfavorable Change on GO and AL Scales

TABLE 14

Change Shown on the Illinois Test of Psycho-linguistic Ability by Children of Parents Showing Favorable and Nonfavorable Change on the GO Scale

Group A, Favorable Change. N = 33

Group B, Nonfavorable Change. N = 52

Source	Mean Square	DF	F-Ratio	P
Total	943.810	169		
Between	1,456.874	84		
Groups	22.395	1	.015	.898
Error (G)	1,474.157	83		
Within	436.782	85		
Trials	26,114.406	1	198.835	.000
G X T	111.140	1	.846	.637
Error (T)	131.337	83		

Group Means	A	B
	165.409	166.154

Trial Means	1	2
	153.471	178.259

G X T Means		1	2
	A	152.000	178.818
	B	154.404	177.904

TABLE 15

Change Shown on the Illinois Test of Psycho-linguistic Ability by Children of Parents Showing Favorable and Nonfavorable Change on the AL Scale

Group A, Favorable Change. N = 48

Group B, Nonfavorable Change. N = 39

Source	Mean Square	DF	F-Ratio	P
Total	1,048.158	173		
Between	1,654.905	86		
Groups	6,470.541	1	4.049	.045
Error (G)	1,598.250	85		
Within	448.385	87		
Trials	26,788.971	1	186.336	.000
G X T	.340	1	.002	.960
Error (T)	143.767	85		

Group Means	A	B
	169.031	156.769

Trial Means	1	2
	151.126	175.943

G X T Means		1	2
	A	156.583	181.479
	B	144.410	169.128

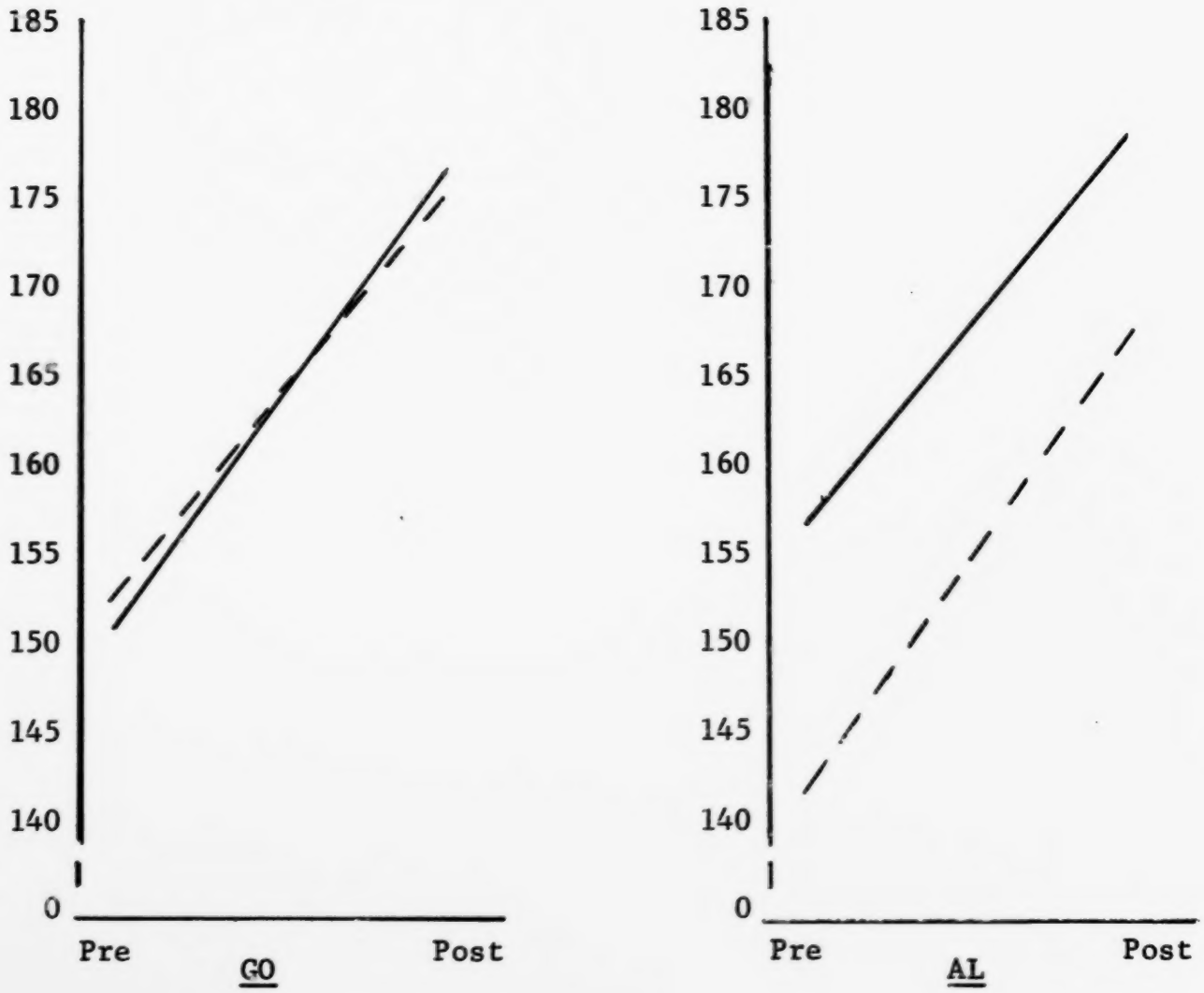


FIGURE 6

Change Shown on Illinois Test of Psycho-linguistic Ability by Children of Parents Showing Favorable and Nonfavorable Change on GO and AL Scales

a higher mean score on the second administration of the test, while children of parents showing favorable change on the AL Scale showed a higher mean score on the first administration of the test; again these differences were not statistically significant. For the Gates-MacGinitie Readiness Test, children of parents showing favorable change on both scales obtained a slightly higher mean score on the first administration of the test, with children of parents showing nonfavorable change on both scales obtaining slightly higher means on the second administration; once again the differences were not statistically significant.

Hypothesis V predicted that Latin parents would show more favorable change on the GO and AL scales than Negro parents. This hypothesis was not confirmed. Results of the analyses are shown in Tables 16 and 17, and in Figure 7.

For the GO Scale, the difference between groups was significant, with the Latin parents showing higher overall means than the Negro parents for the administrations of the parent interview. Mean scores for

TABLE 16

Change Shown by Ethnic Groups on GO Scale

Group A, Negro Parents. N = 57

Group B, Latin Parents. N = 51

Source	Mean Square	DF	F-Ratio	P
Total	12.679	215		
Between	20.929	107		
Groups	111.172	1	5.537	.019
Error (G)	20.078	106		
Within	4.505	108		
Trials	6.338	1	1.427	.233
G X T	9.427	1	2.123	.144
Error (T)	4.441	106		

Group Means	A	B
	12.798	14.235

Trial Means	1	2
	13.648	13.306

G X T Means		1	2
	A	12.772	12.825
	B	14.628	13.843

TABLE 17

Change Shown by Ethnic Groups on AL Scale

Group A, Negro Parents. N = 57

Group B, Latin Parents. N = 51

Source	Mean Square	DF	F-Ratio	P
Total	7.980	215		
Between	12.362	107		
Groups	110.773	1	9.689	.003
Error (G)	11.433	106		
Within	3.639	108		
Trials	13.500	1	3.939	.047
G X T	16.166	1	4.716	.030
Error (T)	3.428	106		

Group Means	A	B
	8.140	6.706

Trial Means	1	2
	7.213	7.713

G X T Means		1	2
	A	7.632	8.649
	B	6.745	6.667

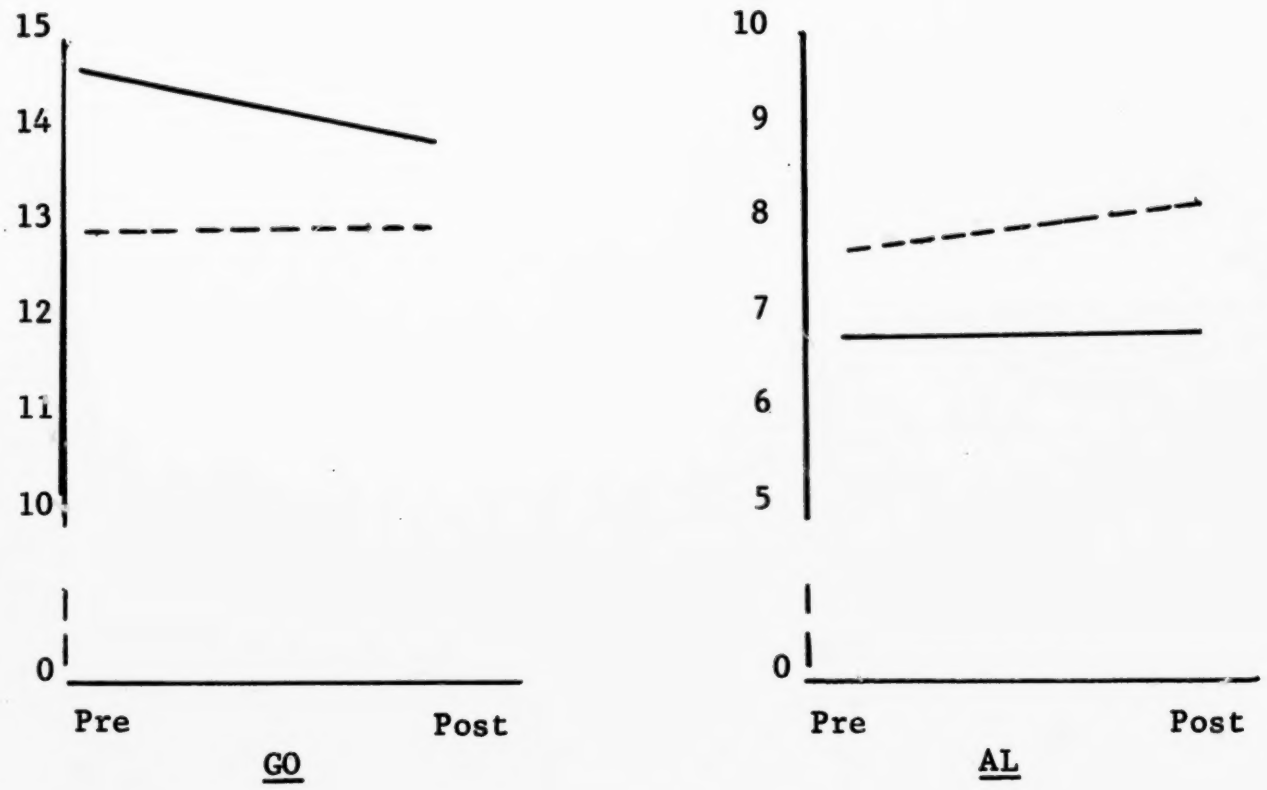


FIGURE 7

Change Shown by Ethnic Groups on GO and AL Scales

both administrations for the Negro parents remained essentially unchanged, however, and the mean score for the second administration was slightly lower for the Latin parents; still, this interaction effect was not statistically significant.

For the AL Scale, the difference between groups, the difference between trials, and the interaction difference were all statistically significant. Negro parents had higher overall mean scores than did Latin parents; the Negro parents also gained, on the average, on the second administration, while the Latin parents' mean score dropped slightly. Thus, while the interaction effect was significant, it was exactly opposite to the direction specified in Hypothesis V.

In order to determine whether the experimental treatments administered in the larger study might have affected parent participation in the program and changes in scale scores, the Head Start classes represented by the children of actively participating parents and parents showing positive change on the scales were investigated. Every class conducted was represented in both cases, and no particular pattern of classes was observable.

Also, ethnic group membership was checked for both groups of parents, to determine whether active participation in the program and positive change on the scales might be related to one or the other group. Again, in both cases the proportion of Latins and Negroes was about equal.

Summary

Results of the analyses of the hypotheses stated in this study were presented, and it was shown that none of the hypotheses was confirmed. Implications of these findings will be discussed in the following chapter.

C H A P T E R V

DISCUSSION

Although the results of this study were negative, an inspection of the data reveals a possible trend which might be investigated more thoroughly in a separate study. It may be that higher scale scores, indicating more positive responses in the areas under investigation, precede rather than result from performance. Performance, in this study, refers to active parental participation in the Head Start program, and to scores obtained by the children on the instruments administered to them. This hypothesis reverses the assumptions underlying the present study.

Review of Study

In the case of comparisons involving actively participating parents and nonactively participating parents, while neither group showed significant change from the first to the second administration of the parent

interview, the actively participating group obtained higher mean scores on both administrations of the instrument, although the difference was statistically significant only for the AL Scale. Since no significant change was involved for either group, it would seem that a higher aspiration level, and possibly a more generally optimistic outlook for the Head Start child characterized those parents, both before and after participation, who chose to participate in the Head Start program actively. It seems probable that these frames of reference were partly responsible for the degree of participation undertaken by these parents. Consistent with this interpretation are the findings that prior experience with the Head Start intervention program does not result in initially higher scale scores, and that current experience with the program does not result in significant change in the scores for the two administrations of the instrument.

However, a closer look at the total group reveals individual differences in response to the scales which may be related to the performance of the children in terms of the instruments which were administered to them in the

course of the Head Start program. Children of parents showing favorable change on the scales obtained higher scores than children of parents showing unfavorable change at pretesting on 8 out of 10 comparisons, and at posttesting on 7 out of 10 comparisons. Conversely, children of parents showing unfavorable change on the scales obtained equivalent or higher scores at pretesting on only 2 out of the 10 comparisons, and at posttesting on 3 out of 10 comparisons. This finding, if it can be replicated, would lend support to the interpretation that those parents who showed favorable change on the scales had initially held more positive concepts in the areas under investigation and had transmitted those concepts to their children. Children of parents showing favorable as well as unfavorable change on the scales obtained significant gains on all tests administered to them. Although these results fall well within the range of chance occurrence, it is interesting to note that higher scores on both administrations of all the instruments were more frequently obtained by children of parents showing favorable change on the scales.

Regarding differences between Negro and Latin parents in their responses to the scales, the Negro parents as a group hold a less optimistic world view but a more optimistic outlook on the possibilities for their children's achievement than the group of Latin parents. The group of Negro parents also significantly raised their aspiration level for their children on the final administration of the parent interview.

A plausible interpretation of these results would be that Negro parents are aware that changes taking place within the society are favorable for future achievement by Negroes, but that these changes are progressing slowly and are more likely to benefit their children 15 or 20 years from now than to provide concrete changes in their own status in the near future. Conversely, the Latin parents as a group hold a more optimistic world view than the group of Negro parents, although at the time of the final administration of the parent interview the Latin parents obtained a somewhat lower score than at the time of the first administration of the instrument. The latin parents also hold a less optimistic outlook concerning aspiration

level for their children. It could be postulated that the Latin parents, somewhat less subject to overt discrimination, are less concerned with progress in the civil rights area than are the Negro parents and are responding to larger trends in the society, such as continuing inflation and the failure to end the war in Vietnam, which could contribute to a pessimistic view of society. This general pessimism could, in turn, depress their aspiration level for their children, who must live in the society they see as becoming less desirable. The comparison thus would be concerned with different adaptation levels to the aspects of society under consideration.

A factor of interest which emerged from this study is the low correlation between the General Optimism and the Aspiration Level scales. This was an unexpected finding, and seems to indicate that separate frames of reference underlie the two measures. It is possible, of course, that since the parent interview was administered in direct connection with the Head Start program, and thus was obviously related to a learning situation for the parent's children, the questions pertaining to the education and

future goals for the child were in a sense isolated from the other questions and given an emphasis which might not under other circumstances obtain. It is possible, in other words, that this scale is not as independent of other frames of reference as this particular correlation would indicate.

The basic assumption on which this study was based is that the Head Start program would be an effective agent of change within the whole family structure if parents participated in the program and underwent new experiences which resulted in the invalidation of pessimistic constructs and the formation of more optimistic frames of reference. It was also postulated that, in addition to the experience gained by the children from their participation in the program, they would also benefit from positive changes in the family structure, in terms of their own enhanced view of their world and their capacity to function in it.

Unfortunately, the results are clearly negative in this attempt to assess the value of Project Head Start in areas other than the immediate impact of the program upon

participating children. The clear and consistent finding in this case is that the program did have an immediate and positive impact upon the children. They showed significant gain in general ability level and specific school readiness characteristics, as measured by standard test instruments, as a result of the intervention program.

It is equally clear that in terms of the theory on which the hypotheses tested in this study were based, it cannot be concluded from the results that the Head Start experience is sufficiently important in the lives of the parents of participating children to alter their constructs in the areas under investigation sufficiently to affect the performances of their children, at least insofar as these constructs are measurable with the methods utilized.

It would be desirable in the future to design instruments to assess more precisely parental viewpoints concerning vital areas to which Project Head Start might specifically address itself. If the Head Start program is to have a lasting influence on the children of the poor and their families, it must affect the family structure in a basic way.

Three areas which are in need of further research seem particularly important. The first problem concerns the lack of consistency with which various Head Start centers have approached the attempt to involve parents in the programs. A systematic approach toward the problem of parent involvement in Project Head Start should be developed so that the probability of more parents becoming involved is increased. Such involvement must also be meaningful, and it must lead to basic changes in the life structure of participating parents.

The second problem concerns the development of adequate methods of assessing nonobvious changes which may occur in the lives of children and parents as a result of their Head Start experiences. Many potential beneficial results of the program are intangible, unlike absolute test scores, and lie in the realm of attitudes and behaviors which are not easily accessible to measurement and evaluation.

The third problem concerns consistent longitudinal follow-up studies conducted to chart the progress over time of Head Start children and their families. Without

knowledge of later performance, adequate assessment of current intervention practices is difficult to achieve.

Summary

The present study was an attempt to assess the impact of Project Head Start upon the parents of children who participated in a six-month Head Start intervention program in Austin, Texas. The sample was comprised of 57 Negro and 51 Latin-American parents.

From the Parent Interview, which was administered to the female caretaker (usually the mother) of each child enrolled in the Head Start program both before and after the intervention had taken place, scales were constructed to measure the level of general optimism reported by each parent, and the aspiration level for the participating child reported by each parent.

It was hypothesized that prior parental experience with Project Head Start, current parental experience with the program, and active parental participation in the program would increase parental scores on the two scales. None of these hypotheses was confirmed.

It was further predicted that children of parents who showed favorable changes on a scale would gain more from their own Head Start experiences, in terms of changes in the scores on the tests administered to them both before and after the program, than children of parents who showed unfavorable changes on that scale. This prediction was not confirmed.

It was also hypothesized that Latin-American parents would show more favorable change on the scales than Negro parents; this hypothesis was not confirmed.

An hypothesis which might be worth testing in future studies is that high scores on the scales may precede, rather than result from, performance. As stated earlier, performance in this study refers to active parental participation in the program, and to scores obtained by the children on the instruments administered to them.

It was suggested that in future research, instruments be constructed to assess more adequately some of the factors with which this study was concerned.

A P P E N D I C E S

A P P E N D I X A

Items comprising the scale for General Optimism (GO):

In spite of what some people say, the lot of the average man is getting worse.

Parent's Reply	Original Score
Strongly disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly agree	5

Original Score	Scale Score
5	1
4	2
3	3
2	4
1	5

It's hardly fair to bring children into the world with the way things look for the future.

Parent's Reply	Original Score
Strongly disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly agree	5

Original Score	Scale Score
5	1
4	2
3	3
2	4
1	5

Nodays a person has to live pretty much for today and let tomorrow take care of itself.

Parent's Reply	Original Score
Strongly disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly agree	5

Original Score	Scale Score
5	1
4	2
3	3
2	4
1	5

These days a person doesn't really know who he can count on.

Parent's Reply	Original Score
Strongly disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly agree	5

Original Score	Scale Score
5	1
4	2
3	3
2	4
1	5

There's little use writing to public officials because often they aren't really interested in the problems of the average man.

Parent's Reply	Original Score
Strongly disagree	1
Disagree	2
Undecided	3
Agree	4
Strongly agree	5

Original Score	Scale Score
5	1
4	2
3	3
2	4
1	5

A P P E N D I X B

Items comprising the scale for Aspiration Level for Child (AL):

How far do you think (child's name) will go in school?

Parent's Reply	Original Score
No response to question	0
Don't know	1
Finish grade school	2
Finish junior high school	3
Take vocational work in high school	4
Finish high school	5
Take vocational work after high school	6
Go to college	7
Finish college	8
Go to graduate school	9

For purposes of scale construction, the original scores as recorded in the Parent Interview were combined as shown below. The scale score received for each item, then, is a point value to which the original scores have been assigned.

Original Score	Scale Score
0, 1	0
2, 3	1
4, 5	2
6, 7	3
8	4
9	5

This is a picture showing children in school. This one (on the left) is doing the very best work. This one (on the right) is doing the very poorest work. Please point to the one you think (child's name) will be when he/she first enters school.

Parent's Reply	Original Score
No response to question; don't know	0
First in class (very best work)	1
Second in class	2
Third in class	3
Fourth in class	4
Fifth in class	5
Sixth in class	6
Seventh in class	7
Eighth in class	8
Ninth in class	9
Tenth in class (very poorest work)	10

Original Score	Scale Score
9, 10	1
7, 8	2
5, 6	3
3, 4	4
1, 2	5

What kind of job do you think (child's name) will get?

Parent's Reply	Original Score
No response to question	0
Don't know	1
Unskilled worker	2
Semi-skilled worker	3
Skilled worker	4
Owner of little business, clerical and sales workers, technicians	5
Administrative personnel or large concerns, owners of small independent businesses, semi-professionals	6
Managers and proprietors of medium-sized businesses and lesser professionals	7
Executives and proprietors of large concerns, major professionals	8

On the post-test, this item contained an additional category, 9, which stated: "Leave the decision up to the child." Since only 3 parents utilized this response, however, it was decided to include the item and place those three responses at the median.

Original Score	Scale Score
0, 1	0
2, 3	1
4, 5	2
6	3
7	4
8	5

A P P E N D I X C

Items comprising the scale for Child Rearing Practices (CRP):

How often is (child's name) read to?

Parent's Reply	Original Score
No response to question; not applicable	0
Seldom or never	1
Sometimes (at least once a week)	2
Often (several times a week)	3
Regularly (at least once a day)	4
Very frequently (much of each day)	5

Original Score	Scale Score
0, 1	0
2	1
3	2
4, 5	3

What do you do if (child's name) asks a question that you can't answer?

Parent's Reply	Original Score
No response to question; not applicable	0
Child never asks	1
I know all the answers; child never asks a question I can't answer	2
Change the subject; ignore him	3
Just tell him "I don't know the answer"	4
Answer as best as one can	5
Send him to someone else	6
Look it up for him or with him	7

Original Score	Scale Score
0, 1, 3	0
2, 5	1
4, 6	2
7	3

What is one of the little things that (child's name) does that he/she shouldn't? What do you usually say or do if (child's name) does this? From this information the interviewer codes parent's reaction to mild infraction:

Parent's Reply	Original Score
No response to question	0
Punishment	1
Punishment plus "constructive" response	2
Would do nothing	3
Constructive response alone	4

Original Score	Scale Score
0, 3	0
1	1
2	2
4	3

What do you consider one of the worst things that (child's name) does? What do you usually say or do if (child's name) does this? From this information the interviewer codes parent's reaction to severe infraction:

Parent's Reply	Original Score
No response to question	0
Punishment	1
Punishment plus "constructive" response	2
Would do nothing	3
Constructive response alone	4

Original Score	Scale Score
0, 3	0
1	1
2	2
4	3

A P P E N D I X D

Items comprising parent participation in the Head Start Program:

Did you attend any of the parent meetings this year?

Parent's Reply	Original Score
No response to question; not applicable	0
No, did not attend	1
Yes, 1 or 2 times	2
Yes, 3 or 4 times	3
Yes, 5 or 6 times	4
Yes, 7 or 8 times	5
Yes, 9 or more times	6

Original Score	Participation Score
0, 1	0
2	1
3	2
4	3
5	4
6	5

How many times did you go to the Head Start Center to talk about (child's name)?

Parent's Reply	Original Score
No response to question; not applicable	0
1 or 2 times	1
3 or 4 times	2
5 or 6 times	3
7 or 8 times	4
9 or more times	5

Responses to this question were utilized as given above.

During the year, did you do any volunteer work in (child's name) Head Start Class? About how often did you help out?

Parent's Reply	Original Score
No response to question; not applicable	0
No, did not participate	1
Yes, less than once a month	2
Yes, about once or twice a month	3
Yes, about once a week	4
Yes, about twice a week	5
Yes, about three times a week	6
Yes, about four times a week	7
Yes, about five times a week	8

Original Score	Participation Score
0, 1	0
2	1
3	2
4	3
5	4
6, 7, 8	5

About how many meetings of the parents' council have you attended?

Parent's Reply	Original Score
No response to question; not applicable	0
No, there was no parents' council	1
No, was not member of council	2
Yes, 1 or 2 times	3
Yes, 3 or 4 times	4
Yes, 5 or 6 times	5
Yes, 7 or 8 times	6
Yes, 9 or 10 times	7
Yes, 11 or 12 times	8
Yes, 13 or more times	9

Original Score	Participation Score
0, 1, 2	0
3	1
4	2
5	3
6	4
7, 8, 9	5

In addition to the above, the one parent who reported having a paying job with Head Start as a teacher aide was included in the actively participating parent group.

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